

What Is Claimed Is:

1 ~~Sub A1~~ 1. A method for selectively auditing accesses to a relational database
2 system, comprising:
3 receiving a query from a client at a database server that processes queries
4 for the relational database system;
5 processing the query at the database server to produce a query result;
6 creating an audit record for rows in relational tables that are accessed by
7 the query and that satisfy an auditing condition;
8 recording the audit record in an audit record store; and
9 returning the query result to the client.

1 2. The method of claim 1, further comprising modifying the query
2 prior to processing the query, so that processing the query causes the audit record
3 to be created and recorded for rows in relational tables that are accessed by the
4 query and that satisfy the auditing condition.

1 ~~Sub A2~~ 3. The method of claim 1, wherein the auditing condition is
2 associated with a table in the relational database system.

1 4. The method of claim 1, wherein the auditing condition includes a
2 plurality of auditing conditions.

1 5. The method of claim 1, wherein the audit record includes:
2 a user name for a user making the query;
3 a time stamp specifying a time of the query; and
4 a text of the query.

1 6. The method of claim 1, wherein creating the audit record includes:
2 determining if auditing is enabled; and
3 creating the audit record if auditing is enabled.

1 7. The method of claim 6, wherein auditing is enabled on a table by
2 table basis.

1 8. The method of claim 1, wherein the audit record is created while
2 the query result is being generated.

1 9. The method of claim 1, wherein the audit record is created after the
2 query result is generated.

1 10. The method of claim 1, wherein the auditing condition includes a
2 condition for a field within the relational database system.

1 11. A computer-readable storage medium storing instructions that
2 when executed by a computer cause the computer to perform a method for
3 selectively auditing accesses to a relational database system, the method
4 comprising:
5 receiving a query from a client at a database server that processes queries
6 for the relational database system;
7 processing the query at the database server to produce a query result;
8 creating an audit record for rows in relational tables that are accessed by
9 the query and that satisfy an auditing condition;
10 recording the audit record in an audit record store; and

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11 returning the query result to the client.

1 12. The computer-readable storage medium of claim 11, wherein the
2 method further comprises modifying the query prior to processing the query, so
3 that processing the query causes the audit record to be created and recorded for
4 rows in relational tables that are accessed by the query and that satisfy the auditing
5 condition.

1 Sub #3 13. The computer-readable storage medium of claim 11, wherein the
2 auditing condition is associated with a table in the relational database system.

1 14. The computer-readable storage medium of claim 11, wherein the
2 auditing condition includes a plurality of auditing conditions.

1 15. The computer-readable storage medium of claim 11, wherein the
2 audit record includes:
3 a user name for a user making the query;
4 a time stamp specifying a time of the query; and
5 a text of the query.

1 16. The computer-readable storage medium of claim 11, wherein
2 creating the audit record includes:
3 determining if auditing is enabled; and
4 creating the audit record if auditing is enabled.

1 17. The computer-readable storage medium of claim 16, wherein
2 auditing is enabled on a table by table basis.

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1 18. The computer-readable storage medium of claim 11, wherein the
2 audit record is created while the query result is being generated.

1 19. The computer-readable storage medium of claim 11, wherein the
2 audit record is created after the query result is generated.

1 20. The computer-readable storage medium of claim 11, wherein the
2 auditing condition includes a condition for a field within the relational database
3 system.

1 21. An apparatus that selectively audits accesses to a relational
2 database system, comprising:
3 a database server;
4 a receiving mechanism, at the database server, that is configured to receive
5 a query from a client;
6 a query processor that is configured to process the query at the database
7 server to produce a query result;
8 an auditing mechanism that is configured to,
9 create an audit record for rows in relational tables that are
10 accessed by the query and that satisfy an auditing condition, and to
11 record the audit record in an audit record store; and
12 a returning mechanism that returns the query result to the client.

1 22. The apparatus of claim 21, further comprising a query modification
2 mechanism that is configured to modify the query prior to processing the query, so
3 that processing the query causes the audit record to be created and recorded for

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1 rows in relational tables that are accessed by the query and that satisfy the auditing
2 condition.

1 ~~Sub~~ 23. The apparatus of claim 21, wherein the auditing condition is
2 associated with a table in the relational database system.

1 24. The apparatus of claim 21, wherein the auditing condition includes
2 a plurality of auditing conditions.

1 25. The apparatus of claim 21, wherein the audit record includes:
2 a user name for a user making the query;
3 a time stamp specifying a time of the query; and
4 a text of the query.

1 26. The apparatus of claim 21, wherein the auditing mechanism is
2 configured to:
3 determine if auditing is enabled; and to
4 create the audit record if auditing is enabled.

1 27. The apparatus of claim 26, wherein the auditing mechanism is
2 configured to enable auditing on a table by table basis.

1 28. The apparatus of claim 21, wherein the auditing mechanism is
2 configured to create the audit record while the query result is being generated.

1 29. The apparatus of claim 21, wherein the auditing mechanism is
2 configured to create the audit record after the query result is generated.

- 1 30. The apparatus of claim 21, wherein the auditing condition includes
2 a condition for a field within the relational database system.

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